
CHAPTER 1—INTRODUCTION

1.1 INTRODUCTION AND BACKGROUND

This Moab Master Leasing Plan (MLP) and Proposed Resource Management Plan Amendments/Final Environmental Impact Statement (FEIS) for the Moab and Monticello Field Offices (MLP/FEIS) has been prepared by the United States (U.S.) Department of the Interior, Bureau of Land Management (BLM), Canyon Country District. The MLP/FEIS is based on comments received during the public comment period on the Master Leasing Plan/Draft Resource Management Plan Amendments/Draft Environmental Impact Statement (MLP/DEIS).

The BLM Washington Office (WO) Instruction Memorandum (IM) No. 2010-117: *Oil and Gas Leasing Reform – Land Use Planning and Lease Parcel Reviews* (May 17, 2010) and BLM Handbook H-1624-1: *Planning for Fluid Mineral Resources* (January 28, 2013) outline the process and criteria for preparing a MLP. Although the IM and the Handbook pertain to oil and gas leasing decisions, the BLM determined that the MLP concepts are also applicable to potash leasing decisions. A MLP is a mechanism for completing additional planning, analysis, and decision making that may be necessary for areas meeting the criteria for preparing a MLP. The BLM identified lands within the Moab and Monticello Field Offices which meet the following criteria: 1) largely unleased; 2) industry interest and high mineral development potential; 3) majority Federal mineral interest and; 4) the potential for impacts to important resource values. Therefore, the BLM exercised its discretion to utilize the MLP process. Through the MLP process, the BLM will reconsider mineral leasing decisions in a portion of the Moab and Monticello Resource Management Plan (RMP) Amendments that are covered in the designated Planning Area. The BLM **has conducted** the MLP process at a more focused level than the broader level of analysis normally conducted in an RMP. The purpose of the planning effort is to prepare the Moab MLP, **proposed** amendments to the Moab and Monticello RMPs, and a single Environmental Impact Statement (EIS).

The resource protection measures identified in the Moab MLP will also apply to areas currently under lease where they do not conflict with the rights granted to the holder of the lease. The Federal Government retains certain rights when issuing an oil and gas lease. While the BLM may not unilaterally add a new stipulation to an existing lease that it has already issued, the BLM can subject the development of existing leases to reasonable conditions, as necessary, through the application of Conditions of Approval at the time of permitting.

This planning effort does not entail a full RMP revision, but rather maintains a limited focus on the management decisions pertaining to oil and gas and potash leasing in the Planning Area. Due to the limited focus of this planning effort, decisions that would normally be considered in a full RMP revision will not be addressed.

This document describes the purpose and need for the plan, the affected environment, the alternatives for managing public lands within the Planning Area (including the Proposed Plan), the environmental impacts of those alternatives, and the consultation and coordination in which the BLM engaged in developing the plan.

1.2 PURPOSE AND NEED FOR THE MOAB MLP

1.2.1 Purpose

The MLP process provides additional planning and analysis prior to new leasing of oil and gas and potash within the Planning Area. The Moab MLP enables the Moab and Monticello Field Offices to 1) evaluate in-field considerations such as optimal parcel configurations and potential development scenarios; 2) identify and address potential resource conflicts and environmental impacts from development; 3) develop mitigation strategies through leasing stipulations and best management practices; and 4) consider a range of new constraints, including prohibiting surface occupancy or closing areas to leasing. New mineral leasing stipulations and development constraints would be accomplished through proposed amendments to the existing land use plans (Moab and Monticello RMPs). The EIS analyzes likely development scenarios and land use plan alternatives with varying mitigation levels for mineral leasing.

1.2.2 Need

The BLM introduced the MLP as part of its 2010 Oil and Gas Leasing Reform effort (IM 2010-117). The BLM determined that the Planning Area meets the criteria for preparing an MLP and additional planning and analysis are warranted prior to new or additional mineral leasing and development. In evaluating mineral leasing decisions, as in any land use planning process, the BLM will consider changing circumstances, updated policies, and new information.

Changing Circumstances

During the preparation of the RMPs (2008) for the Moab and Monticello Field Offices, only a limited amount of potash development was projected for existing leases. Large-scale development was considered unlikely. Competition from lower cost producers with large resource bases in New Mexico, the Saskatchewan Province of Canada, and Utah's Great Salt Lake were a significant deterrent that had prevented the exploitation of the undeveloped known potash resources within the Planning Areas for the RMPs.

However, due to a spike in potash prices in 2008, there was renewed interest in the potash resources within the Planning Area for the Moab MLP. The BLM was inundated with applications for potash prospecting and expressions of interest for competitive leasing. It was concluded that the existing RMPs did not adequately address the magnitude of potential potash development. Additional planning was necessary prior to considering new potash leasing.

Updated Policies

Washington Office Instruction Memorandum 2010-117 establishes updated policy on the oil and gas leasing process. In 2011, the BLM Utah State Office completed an implementation plan for the MLP Policy and assessments of areas proposed for an MLP analysis. The BLM Utah State Director then identified six areas where initiating an MLP analysis was appropriate (see "Oil and Gas Leasing Reform Implementation Plan" and Utah MLP Assessments). On February 16, 2011, BLM Director Robert Abbey agreed with the Utah BLM State Director's findings. On March 5, 2012, BLM published a Notice of Intent (NOI) in the Federal Register to prepare the Moab MLP, potential amendments to the 2008 Moab and Monticello RMPs, and an EIS to consider leasing for oil and gas and potash on about 785,000 acres of public lands (see the Notice of Intent to Prepare a Master Leasing Plan, Amendments to the RMPs for the Moab and Monticello Field Offices, and an Associated EIS, 77 Fed. Reg. 13,141 dated March 5, 2012). The NOI invited Federal, State, local, and tribal agencies, along with other stakeholders that may be interested in or affected by the BLM's decision, to participate in the scoping process and to submit comments to BLM or attend public meetings.

New Information

Since the RMPs were completed in 2008, the following new data has been identified for consideration in the MLP process:

- Reasonably Foreseeable Development (RFD) Scenario for Potash in the Moab MLP Area (2014).
- RFD Scenario for Oil and Gas in the Moab MLP Area (2012).
- Moab Field Office Visual Resource Inventory (2011), National Park viewsheds, night skies, and soundscapes.
- Socioeconomic Baseline Report for the Moab MLP (2012).
- New wildlife habitat data from the Utah Division of Wildlife Resources for desert bighorn sheep (2013), pronghorn (2014), deer (2012) and elk (2013).
- New data collected for the Old Spanish National Historic Trail for new cultural resource inventory, viewshed analysis, and historic setting analysis.
- New BLM land acquisitions from the Utah State Institutional Trust Lands Administration (SITLA) as a result of the Utah Recreational Land Exchange Act (2014).
- New information regarding lands with wilderness characteristics.
- Updated film locations from the Moab to Monument Valley Film Commission.
- Identification of heavily visited cultural sites.
- New water information of spring areas, aquifers, and watersheds adjacent to National Parks, and drinking water source protection zones, updated information on impaired waters.
- Identification of high and moderate use of recreation trails, routes, and climbing areas.
- Potential Fossil Yield Classification Areas.
- Sensitive Plant Habitat Areas.

1.3 GENERAL DESCRIPTION OF PLANNING AREA, GEOGRAPHIC SCALE, AND RESOURCES/PROGRAMS

The geographic area being considered in this planning process includes a portion of BLM-administered public lands and Federal mineral estates managed by BLM's Moab and Monticello Field Offices in Grand and San Juan Counties, Utah (Map 3-1). The Planning Area covers approximately 785,567 acres of public lands in **southeast** Utah south of Interstate 70. The area adjoins the town of Moab and Arches National Park. The western boundary is the Green River and the northeastern boundary of Canyonlands National Park. To the south of Moab, the Planning Area includes the Indian Creek/Lockhart Basin/Hatch Point area between Canyonlands National Park and Highway 191. The Planning Area encompasses a mix of land uses including developed and dispersed recreation, limited oil and gas development, and a potash facility. Interest in potash exploration and development is peaking in the area. Table 1-1 shows the total acreage within the Planning Area including, private, State, and other Federal ownership. Proposed decisions

included in the alternatives for the Moab MLP apply only to BLM-administered lands within the Planning Area.

The majority of the public lands within the Planning Area are managed by the Moab Field Office. Approximately 581,624 acres (61 percent of the Planning Area) are managed by the Moab Field Office and 203,943 acres (22 percent of the Planning Area) are managed by the Monticello Field Office. An additional 13 percent of land in the Planning Area is State Trust Lands, administered by SITLA. Land ownership in the Planning Area is depicted in Table 1-1. The Planning Area surrounds Arches National Park, with the exception of the southeast side of the park, and also borders Canyonlands National Park to the north and east. Privately owned lands are concentrated primarily around the major transportation routes, river corridors, and areas suitable for agricultural development.

The Planning Area has a high potential for the development of oil, gas, and potash as stated in the RFD scenarios. Interest in oil, gas, and potash exploration and development is high. The BLM has received recent Expressions of Interest to lease over 120,000 acres for oil and gas. Additionally, the BLM has received 223 potash permit applications covering 416,464 acres since 2008.

The Planning Area also has some of the most iconic scenery on the Colorado Plateau. The Planning Area is immediately adjacent to Arches and Canyonlands National Parks. About 2 million visitors a year enjoy a wide variety of recreational experiences within the Planning Area (Stevens 2014). The Planning Area contains lands identified by the BLM as having outstanding visual resources, high value recreation areas, lands with wilderness characteristics, and high quality air resources. The Planning Area also includes six Areas of Critical Environmental Concern (ACEC), six Special Recreation Management Areas (SRMA), portions of the Old Spanish National Historic Trail, and two suitable Wild and Scenic Rivers (the Colorado River and the Green River).

Table 1-1. Land Ownership within the Planning Area

Land Status	Moab Field Office Acres	Monticello Field Office Acres	Planning Area Total Acres
BLM	581,624	203,943	785,567
State	91,805	32,490	124,295
State Parks	4,337	40	4,377
Private	17,855	14,375	32,230
Split Estate*	9,855	5,281	15,136
Total	695,621	250,848	946,469

*Acreage not additive

Source: BLM Canyon Country District

1.4 SCOPING/ISSUES

Scoping is an early and open process for determining the scope, or range, of issues to be addressed in the planning process. Public scoping is required in order to meet the public involvement requirements of the Federal Land Policy and Management Act (FLPMA), the National Environmental Policy Act (NEPA), and 43 Code of Federal Regulations (CFR) 1610.2. Planning issues are disputes or controversies about existing and potential land and resource allocations, levels of resource use, production, and related management practices. Scoping identifies the affected public and agency concerns and defines the relevant issues to be used in developing the alternatives and analyzing the impacts of these alternatives in the MLP/DEIS.

Public scoping was initiated in order to meet the public involvement requirements. This cooperative process included soliciting input from interested State and local governments, tribal governments, other Federal agencies, organizations, and individuals to identify the scope of issues to be addressed in the plan and to assist in the formulation of reasonable alternatives. The scoping process was an excellent effective method for opening dialogue between the BLM and the general public about management of the public lands and for identifying the concerns of those who have an interest in the area.

A public scoping period began with the publication of the NOI in the Federal Register on March 5, 2012. The scoping period included three public scoping meetings held in Moab, Monticello, and Salt Lake City, Utah. The formal scoping period ended on May 7, 2012. There were 319 comments extracted from the 181 individual comment submissions. The majority of comments pertained to policy and administrative actions, socioeconomics, water and soil resources, fish and wildlife and special status species, air resources, and visual resource management and noise. Additional comments pertained to recreation, minerals, climate change, cultural and paleontological resources, lands with wilderness characteristics, lands and realty, and special designations. Chapter 5 contains additional information about the results of the scoping process. The Final Scoping Report is available for review on the BLM website for the Moab MLP. The Scoping Report summarizes the scoping process, reports on the comments received, and identifies the issues raised during the scoping process.

For the MLP planning process, scoping comments received from the public were placed in one of two categories:

1. Issues to be addressed in the Moab MLP
 - a. Issues used to develop alternatives
 - b. Issues addressed in other parts of the EIS
2. Issues considered but not further analyzed
 - a. Issues addressed through administrative or policy action
 - b. Issues beyond the scope of the plan
 - c. Other issues not addressed.

The following compilation of issues was derived from refinement of the original issues identified during the scoping period and additional issues that have been identified through the planning process as new conditions and/or information became available. Issues are organized by resource topic and similar issues are grouped together where possible.

1.4.1 Issues to be Addressed in the Moab MLP

Air Quality

Issues Used to Develop Alternatives

- How would the MLP address emissions and pollutants affecting air quality resulting from oil and gas and potash development?
- What mitigation measures and design features would be implemented to address potential impacts to air quality or air quality related values (AQRV)?
- How would the MLP address fugitive dust and dust suppression associated with mineral operations?
- How would the MLP address impacts to air quality and AQRVs and compliance with the National Ambient Air Quality Standards (NAAQS)?

- What management actions in the MLP would be developed to address emission standards or limitations, BMPs, control technologies, and considerations of the pace of development?

Issues Addressed in Other Parts of the EIS

- Would quantitative modeling be required to determine impacts to air quality and/or AQRV?
- How would cumulative impacts on air quality resources (including dust generation) that occurred from oil and gas and potash development be addressed?
- How would the MLP address contributions from fugitive dust on early snowmelt?

Climate Change

Issues Used to Develop Alternatives

- What design features and technologies are necessary to minimize contributions to greenhouse gas (GHG) emissions and climate change?
- What measures are necessary to reduce GHG emissions?

Issues Addressed in Other Parts of the EIS

- How would the MLP address GHG emissions and their contributions to climate change including soil health, vegetation growth, wildlife, and water availability?

Cultural/Paleontology Resources

Issues Used to Develop Alternatives

- How would discovered and undiscovered paleontological and cultural resources be protected?
- Would the BLM require surveys for paleontological resources prior to surface disturbance associated with mineral development?
- How would prehistoric rock art and historic features be protected from fugitive dust?

Issues Addressed in Other Parts of the EIS

- How would mineral leasing and development impact cultural and paleontological resources?

Lands and Realty

Issues Used to Develop Alternatives

- What lease stipulations would be developed to protect high use filming locations?
- How would the MLP protect major utility corridors?
- How would the structural integrity of the Needles and Anticline Overlook Roads be preserved?
- What mineral leasing stipulations would be applied to the locatable mineral withdrawals along the major rivers?

Issues Addressed in Other Parts of the EIS

- How would the MLP address State and private inholdings?
- How would the MLP address the ability to lease State lands and private inholdings that could be impacted by BLM leasing decisions?

Lands with Wilderness Characteristics

This plan amendment would not make decisions regarding whether or not lands inventoried by the BLM as having wilderness characteristics should be managed to protect, preserve, and maintain these characteristics. Therefore, this plan amendment would not make decisions for managing new areas for their wilderness values. The BLM is required under Manual 6310 to keep current its inventory of wilderness characteristics.

Issues Used to Develop Alternatives

- What management actions and/or stipulations are needed to minimize impacts to lands with wilderness characteristics from mineral development?

Issues Addressed in Other Parts of the EIS

- How would mineral leasing and development impact lands with wilderness characteristics?

Livestock Grazing

Issues Addressed in Other Parts of the EIS

- How would construction of a potash processing facility impact livestock grazing?

Minerals

Issues Used to Develop Alternatives

- What areas would be available for mineral leasing and development and what restrictions and BMPs would be imposed to protect resource values?
- What BMPs would be imposed on the transportation of minerals to protect other users of public lands?
- What stipulations would be imposed on mineral development to prevent rock falls along cliff faces which impose a public safety hazard?
- What BMPs would be developed to protect birds from the impacts of potash evaporation ponds and pits?

Issues Addressed in Other Parts of the EIS

- How would leasing decisions affect the development of mineral resources?

Recreation

Issues Used to Develop Alternatives

- What protections would be applied to viewsheds associated with recreation experiences?
- How will the MLP protect high use recreation opportunities and assets that occur on roads, trails, and sites that support hiking, biking, boating, off-highway vehicles, camping, equestrian, and rock climbing from mineral development?
- How should recreation areas adjacent to National Parks be protected?
- How should recreation focus areas designated in the Moab RMP be protected?

- How should commercially marketed recreation assets such as Jeep Safari routes and non-motorized trails be protected from mineral development?

Issues Addressed in Other Parts of the EIS

- How would mineral leasing and development impact recreation resources and experiences?

Socioeconomics

Issues Addressed in Other Parts of the EIS

- How will the MLP consider the social impacts that mineral development has on the demographics and social institutions of affected communities?
- How will the MLP take into consideration the economic sustainability of recreation and tourism as compared to mineral development?
- How will health and safety of surrounding local populations and recreationists be addressed in the MLP?
- How will environmental justice be addressed in the MLP?
- How will the MLP address non-market values as well as ecosystem services such as visual and air quality and water resources?
- How will the MLP address potential economic impacts directly related to both mineral development and recreation activities, such as employment and labor income, pay levels, rents and royalties, and fiscal (severance and property taxes) benefits to State and local governments?
- Will the MLP address the potential impacts associated with mineral development to the local communities and population changes, such as housing, demographics, and local vs. non-resident labor?
- How will the MLP address the economic impact of increased mineral development on the recreation economy in general and on the commercial recreation sector in particular?

Special Designations

Issues Used to Develop Alternatives

- What restrictions or stipulations would be placed on mineral development to provide the necessary protections to identified special designation areas and values (ACECs, Wild and Scenic Rivers, and National Historic Trails)?
- How would the BLM address the protection of Old Spanish National Historic Trail segments (Blue Hills and Moab Trail Segment) located within the Planning Area and the viewshed of these segments?

Issues Addressed in Other Parts of the EIS

- How would mineral leasing decisions impact areas with special designations?

Vegetation/Special Status Species

Issues Used to Develop Alternatives

- How would the MLP address the control of noxious weeds and invasive species?
- Would a monitoring program be implemented to insure that reclamation efforts have been successful?

- How would the Isley milkvetch and the Cisco milkvetch (sensitive plant species proposed for listing under the Endangered Species Act) be protected from mineral development?
- What leasing stipulations and BMPs would be developed to protect vegetation?
- How would mineral activities be managed during periods of drought?
- How would sagebrush/steppe habitat, essential to wildlife, be managed?
- What reclamation measures would be developed for restoring vegetation?

Issues Addressed in Other Parts of the EIS

- How would mineral activities impact vegetation?

Visual Resource Management/Auditory Management

Issues Used to Develop Alternatives

- How would important viewsheds from National and State Parks be protected?
- What provisions would be developed to minimize noise levels associated with mineral development near high use recreation areas and National Parks?
- How would the BLM utilize up to date visual resource inventories?
- What mitigation measures would be developed in order to minimize impacts to the visual quality of the area from mineral leasing and development?
- What mitigation measures would be developed to minimize impacts to night skies?

Issues Addressed in Other Parts of the EIS

- How would mineral leasing and development impact visual resources and soundscapes?

Water and Soil Resources

Issues Used to Develop Alternatives

- What stipulations would be applied to mineral leasing in order to protect municipal watersheds, aquifers, water supplies to national parks and other users, wetlands, springs, seeps, rivers, streams, and riparian areas?
- How would the MLP identify and address major, shallow, and sensitive aquifers, groundwater recharge areas, and potential underground sources of drinking water?
- How would the MLP address Sole Source Aquifers and Drinking Water Source Protection Zones?
- How would the MLP address water uses such as surface water and groundwater use including the location and source identification of agricultural, domestic, and public water supply wells, springs, or surface water intakes?
- How would the MLP identify and address surface water quality and impaired or threatened water body segments?
- Would the MLP require a water management plan and water monitoring plan for mineral projects to protect nearby water uses?
- How would the MLP address the effect of sedimentation from mineral development on surface water quality?
- How would the MLP impose stipulations to avoid and mitigate potential significant impacts to water resources?
- What BMPs would be developed to protect surface and groundwater resources?
- How would the MLP address soil erosion and the potential impacts to wildlife from mineral development?

- What stipulations should be applied to mineral leasing to protect steep slopes?
- What stipulations would be applied to mineral leasing to protect water quality?
- What BMPs would be developed to protect stream crossings and ephemeral washes?

Issues Addressed in Other Parts of the EIS

- How would the MLP disclose the water needs of projected development?
- How would the MLP address impacts to surface and groundwater from waste management, solution mining, oil and gas well drilling?
- How should the MLP address soils, sensitive soils, and biological soil crusts?
- How would the MLP address secondary impacts to fish and wildlife from water usage associated with mineral development?
- How would mineral leasing and development impact water resources?

Wildlife and Fisheries/Special Status Species

Issues Used to Develop Alternatives

- What kinds of stipulations and BMPs for oil, gas, and potash leasing would be developed to provide the necessary protections for fish and wildlife habitats?
- How would the MLP protect special status species?
- Would the MLP consider offsite mitigation for wildlife habitat affected by mineral development?
- How would the MLP address impacts to migratory birds and their habitats?
- What BMPs would the MLP develop to protect migratory birds from contact with hazardous materials associated with mineral development?
- What leasing stipulations would be imposed to protect deer, elk, bighorn sheep, and pronghorn?
- What protections would the MLP develop to protect raptors?
- How would the MLP provide protections to areas such as springs, riparian areas, and wetlands that provide habitat to fish and wildlife species?
- Would the MLP utilize the most up-to-date lease notices for Threatened and Endangered species provided by the U.S. Fish and Wildlife Service (USFWS)?
- What lease stipulations would be developed to protect the 100 year floodplain to the Colorado and Green Rivers?
- How would impacts to fish habitat from water depletions due to mineral development be addressed?
- How would the MLP address updated wildlife inventories?
- What surveys would be considered for protection of wildlife species prior to mineral activities?
- What lease stipulations and BMPs for oil, gas, and potash would be developed to provide the necessary protections for fish and wildlife habitat?

Issues Addressed in Other Parts of the EIS

- How would the MLP address wildlife displacement including secondary impacts from visual, auditory, and fugitive dust?
- How would impacts to wildlife and wildlife habitat, such as increased noise, traffic, and surface disturbance, be addressed?
- How would the MLP address habitat fragmentation?

1.4.2 Issues Considered but not Further Analyzed

Issues Addressed Through Policy or Administrative Action

Policy or administrative actions include those actions that are implemented by the BLM as a standard operating procedure, because law requires them, or because they are the policy of the BLM. Administrative actions do not require a planning decision to implement. The following issues raised in scoping can be addressed by administrative actions:

- The Moab MLP should be consistent with current BLM regulations, policies, guidance, IMs, and Memoranda of Understanding.
- Coordination and involvement with local, State, and Federal agencies as well as the public and stakeholders.
- Congress has prohibited funding for implementation of Secretarial Order 3310 pertaining to protecting wilderness characteristics on public lands. However, BLM Manual 6310 provides guidance for inventorying wilderness characteristics on public lands. Wilderness Study Areas (WSA) are closed to mineral leasing and are excluded from the Moab MLP area.
- Analysis of impacts (including short term, long term, and cumulative), considering a range of alternatives (including a no leasing alternative), mitigation, and monitoring in accordance with the NEPA.
- Enforcement of management decisions.
- Use of the best available data.
- Preparation of a RFD scenario for potash that includes the best available data regarding all forms of potential potash development, projected numbers of mining and processing operations, and estimated water and energy use.
- Use of maps displaying land ownership.
- Access across private land.
- Fire safety.
- Compliance with existing laws and policies including the National Historic Preservation Act (U.S.C. 54) and 54 U.S.C. 320301 et seq. (formerly referred to as the Antiquities Act), Native American Graves Protection and Repatriation Act, Endangered Species Act, Clean Air Act, FLPMA, NEPA.
- Surveys for cultural resources prior to surface disturbance associated with mineral development.
- Suspension of mineral leasing during the MLP process.
- Procedures regarding issuance of prospecting permits and preference right leases.
- Consistency with adjoining BLM jurisdictions.
- Administration of existing permits and leases.
- Valid existing rights associated with leases and permits.
- Bonding pertaining to mineral development.
- Policy regarding climate change and GHGs.
- Preparation of a MLP and the inclusion of potash in the process.
- Utilization of the least restrictive stipulations necessary to protect the applicable resource in accordance with the Energy Policy Act of 2005.
- Compliance with the Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development (*The Gold Book*).
- Jurisdiction of State agencies and other Federal agencies.
- Use of existing roads as access routes in accordance with *The Gold Book*.
- Compliance with the Memorandum of Understanding regarding air quality analysis and mitigation.
- Compliance with the Mineral Policy Act and the Mineral Leasing Act.
- Lands closed to mineral development would be done in accordance with FLPMA.
- Health and safety of mineral personnel.
- Conducting surveys for cultural resources prior to surface disturbance associated with mineral development.
- Utilization of lease stipulations and BMPs as specified in BLM WO IM 2010-117.

Issues Beyond the Scope of the Plan

Issues beyond the scope of the plan include all issues not related to decisions that would occur as a result of this planning process. In short, they include decisions that are not under the jurisdiction of the Canyon Country District Office or are beyond the capability of the BLM to resolve as part of the planning process. Issues identified in this category are as follows:

- Exclusion of mineral leasing and development from the area proposed in America's Red Rock Wilderness Act.
- Establishment of new ACECs (Sec. 202 FLPMA), Wild and Scenic Rivers, SRMAs, and areas managed for wilderness characteristics.
- Not excluding areas found by the BLM to possess wilderness characteristics from mineral development.
- Consideration of wilderness quality lands for National Monument status.
- Considering alternative energy sources as substitutes for activities related to mineral development.
- Changes in policy regarding the timeframe for rehabilitation and closure of a drill sites.
- Changes in policy regarding natural gas flaring/venting, fracking, and handling of hydrocarbon wastes.
- Addressing the national and international need for potash.
- Analysis of unknown mineral technologies.
- Expansion of National Parks.
- Availability of funding and personnel for managing management decisions.
- Changes to the approved Travel Plans for the Moab and Monticello RMPs.
- Analysis of emissions (including dust) from vehicles utilized by visitors.

Other Issues not Addressed in the Plan

- Disruption of wildlife corridors is not addressed because the BLM has not identified any major corridors within the Planning Area.
- Shut-off valves for pipelines within critical habitat for Threatened and Endangered species will be addressed and mitigated for proposed pipelines on a site-specific basis.
- Impacts to birds from power lines is not addressed because the BLM does not anticipate the use of power lines for drilling and oil and gas production. Any power lines proposed for potash processing plants will be addressed and mitigated on a site-specific basis.
- Subsidence associated with underground potash solution mining operations will not be addressed. Subsidence impacts are not anticipated due to the depth of the potash deposits.
- The potential for impacts to residential viewsheds associated with mineral activities is considered minimal and will be addressed on a site specific basis.

1.5 PLANNING CRITERIA

Planning criteria are based on appropriate laws, regulations, BLM Manual sections, and policy directives, as well as on public participation and coordination with cooperating agencies, other Federal agencies, State and local governments, and Indian tribes. Planning criteria are the standards, rules, and factors used to resolve issues and develop alternatives. Planning criteria are prepared to ensure decisionmaking is tailored to the issues and to ensure that the BLM avoids unnecessary data collection and analysis. Planning criteria have been developed to guide the development of alternatives. The planning criteria to be considered in the development of the Moab MLP are as follows:

- The planning process will recognize the existence of valid existing rights.

- All decisions made in the planning process will apply only to public lands and, where appropriate, split-estate lands where the subsurface mineral estate is managed by the BLM.
- As described by law and policy, the BLM will strive to ensure that its management actions are as consistent as possible with other adjoining planning jurisdictions, both Federal and non-Federal.
- Management of WSAs will be guided by BLM Manual 6330, *Management of Wilderness Study Areas* (BLM 2012a). Should Congress release all or part of a WSA from wilderness study, resource management would be determined by preparing an amendment to the RMP. Actions inconsistent with RMP goals and objectives will be deferred until completion of requisite plan amendments. Because the management direction of the released land will continue in accordance with the goals and objectives established in the RMP, there is no separate analysis required in this land use plan to address resource impacts if any WSAs are released. If Congress acts to designate any lands within the Planning Area as wilderness, they will be managed pursuant to Congress's designation and the Wilderness Act.
- The Standards for Public Land Health (BLM 1997, 2002a) will apply to all activities and uses. The Standards, as well as BLM guidelines for grazing and recreation management implemented to achieve the Standards, would be applicable to all alternatives to the RMP analyzed in this EIS.
- Baseline Reasonably Foreseeable Development scenarios will be developed and portrayed for oil/gas and potash based on historical, existing, and projected levels for all mineral resource programs.
- Based on consultation with Native Americans, the BLM will consider sites, areas, issues, and objects important to their cultural and religious heritage.
- The BLM will adhere to all applicable laws (including State and local laws where appropriate), regulations, BLM Manual sections, and current policy directives pertaining to management of public lands. For example, all management actions would comply with the Endangered Species Act and all laws concerning cultural resources.
- The socioeconomic impacts of the alternatives will be addressed.

1.6 BLM'S PLANNING PROCESS

The BLM is directed by the FLPMA to plan for and manage "public lands." As defined by the Act, public lands are those Federally owned lands, and any interest in lands (e.g. Federally owned mineral estate), that are administered by the BLM. Land use plans and planning decisions are the basis for every action the BLM undertakes. Public participation and input are important components of land use planning. Land use plans include the RMPs completed for the Moab and Monticello Field Offices in 2008.

FLPMA's implementing regulations for planning, 43 CFR Part 1600, state that land use plans are "designed to guide and control future management actions and the development of subsequent, more detailed and limited scope plans for resources and uses" (43 CFR Part 1601.0-2). Public participation and input are important components of land use planning.

The Moab MLP is being developed through the BLM land use planning amendment process because the BLM has determined development of the Moab MLP is likely to result in changes to the plan level decisions in the existing Moab and Monticello RMPs which must be made through the plan amendment process.

The BLM will reconsider RMP decisions pertaining to the leasing of oil/gas and potash and will evaluate likely development scenarios and varying mitigation levels.

An amendment to the existing RMPs involving mineral leasing decisions is considered a major Federal action for the BLM. The NEPA of 1969, as amended, requires Federal agencies to prepare an EIS for major Federal actions; thus an EIS is prepared in association with the amendment to the existing RMPs.

The BLM planning process, as set forth in the Federal regulations at 43 CFR 1600 and the land use planning guidance found in the BLM Land Use Planning Handbook (BLM 2005a), consists of the following steps for an EIS level land use plan amendment:

1. Identification of Issues
2. Development of Planning Criteria
3. Collect and Compile Inventory Data
4. Analysis of the Management Situation
5. Formulate Alternatives
6. Estimation of Impacts of Alternatives
7. Selection of a Preferred Alternative
8. Selection of the MLP
9. Monitoring and Evaluation.

The planning process is undertaken to resolve management issues and problems as well as to take advantage of management opportunities. The BLM utilized the public scoping process to identify planning issues to direct (drive) the amendment of the existing plans. The scoping process also was used to introduce the public to preliminary planning criteria, which sets limits to the scope of the Moab MLP (Step 2).

As appropriate, the BLM used existing data from files and other sources and collected new data necessary to update or supplement existing data in order to address planning issues and to fill data gaps identified during public scoping (Step 3). Using these data, information concerning the resource management programs, planning issues, and the planning criteria, the BLM completed an Analysis of the Management Situation (Step 4) to describe current management and to identify management opportunities for addressing the planning issues. Current management reflects management under the existing plans as well as management that would continue through selection of the No Action Alternative.

During alternative formulation (Step 5), the BLM collaborated with cooperating agencies to identify a range of management actions that would address issues and resource objectives. Alternatives were constrained by the planning criteria and the purpose and need for the Moab MLP. The alternatives represent a reasonable range of mineral leasing decisions for the Planning Area. Chapter 2 of this document describes and summarizes the Proposed Plan and alternatives.

This EIS also includes an analysis of the impacts of each alternative in Chapter 4 (Step 6). With input from cooperating agencies and BLM specialists, and consideration of planning issues, planning criteria, and the impacts of the alternatives, the BLM identified that, at this time, Alternative D is the Preferred Alternative from among the four alternatives presented (Step 7). This is documented in the MLP/DEIS, which is distributed for public review and comment.

A 90-day public comment period for the MLP/DEIS began with the Environmental Protection Agency's (EPA) publication of the Notice of Availability in the Federal Register. Following receipt and consideration of public comments on the MLP/DEIS, the BLM prepared the MLP/FEIS. Public release of this document will initiate a concurrent 30-day protest period and 60-day Governor's consistency review period. The

BLM will resolve protests and address the Governor's recommended changes and prepare a Record of Decision and an Approved Moab MLP (Step 8).

Monitoring involves tracking the implementation of decisions in the Moab MLP and then collecting data for evaluating the effectiveness of those decisions (Step 9).

1.7 RELATIONSHIP TO BLM POLICIES, PLANS, AND PROGRAMS

The Moab MLP is being prepared to comply with BLM WO IM 2010-117, Oil and Gas Leasing Reform – Land Use Planning and Lease Parcel Reviews and BLM Handbook H-1624-1 – Planning for Fluid Mineral Resources – Chapter V, Master Leasing Plans.

Through the MLP process, the BLM will reconsider, and may amend, mineral leasing decisions in a portion of the Moab and Monticello RMPs (2008) that are covered in the designated Planning Area for the Moab MLP.

The MLP process will consider mineral leasing and development decisions for all BLM resource programs that may be potentially affected by these decisions.

1.8 RELATED PLANS

The BLM will consider plans of other State, local, and Federal agencies that are germane in the development of the Moab MLP and will seek to be consistent with or complementary to these plans whenever possible. The plans the BLM will consider during the planning effort for the Moab MLP include:

1.8.1 State of Utah

- Dead Horse Point State Park RMP (2007)
- Utah's Nonpoint Source Pollution Management Plan (2013)
- Utah's Sensitive Species List (2011)
- Utah's List of Impaired Waters (303d) (2010)
- Utah's Water Plan - Southeast Colorado River Basin (2000)
- Utah's Big Horn Sheep Statewide Management Plan (2013)
- Statewide Management Plan for Elk (2010)

1.8.2 County Land Use Plans

- San Juan County, Utah: San Juan County Master Plan (2008)
- Grand County, Utah: Grand County General Plan Update (2012)

1.8.3 Other Federal Plans

- Canyonlands National Park Resource Management Plan (1996)
- Canyonlands National Park General Management Plan (1979)
- Canyonlands National Park Backcountry Management Plan (1984, 1995)
- Arches National Park, General Management Plan and Development Concept Plan (1989)
- Canyonlands Wilderness Recommendation (1974)
- Arches Backcountry Management Plan (1988)
- Arches National Park Resource Management Plan (1986, 1995)
- Arches Wilderness Recommendation (1974)

1.8.4 Endangered Species Recovery Plans

Endangered species recovery plans are prepared by the USFWS to promote the recovery of threatened and endangered species.

- Colorado Pikeminnow Recovery Plan (2002)
- Humpback Chub Recovery Plan (2002)
- Bonytail Chub Recovery Plan (2002)
- Recovery Implementation Program Environmental Assessment (EA) for the Endangered Fish Species in the Upper Colorado River Basin (1987)
- Mexican Spotted Owl Recovery Plan (2012)
- Razorback Sucker Recovery Plan (2002)
- Final Recovery Plan for Southwestern Willow Flycatcher (2002)
- Recovery Outline for Jones Cycladenia (2008)

1.9 CHANGES FROM THE MLP/DEIS TO THE MLP/FEIS

The MLP/DEIS was released to the public on August 21, 2015, which initiated a 90-day comment period. Comments were received from the public, cooperating agencies, and other interested parties. See Chapter 5, Consultation and Coordination, for details of the public comment process.

Comments on the MLP/DEIS that were received from the public as well as internal BLM review were considered and incorporated as appropriate into the MLP/FEIS. Comments resulted in the addition of clarifying text, adjustments to decisions, updates to information, updates to maps, and minor corrections. However, these changes did not significantly revise proposed land use plan decisions or environmental concerns. Therefore, in accordance with the regulations at 40 CFR 1502.9 (c), the BLM has determined that a supplement to the MLP/DEIS is not necessary because no substantial changes to the Preferred Alternative were made that are relevant to environmental concerns and there are no significant new circumstances or information relevant to environmental concerns and bearing on the Preferred Alternative or its impacts.

Adjustments and clarifications have been made to the Preferred Alternative in the MLP/DEIS which is now presented as the Proposed Plan in the MLP/FEIS. Changes made in the text of the MLP/DEIS based on public comment and BLM internal review are shaded in gray in the MLP/FEIS and are summarized in Table 1-2. Additional information necessary for preparing a FEIS such as Section 1.9 and the updates in Chapter 5 reflecting new information on consultation and coordination along with public outreach and participation are not shaded in gray and are not summarized in Table 1-2.

Table 1-2. Changes from the MLP/DEIS to the MLP/FEIS

Description of Changes	Location in MLP/FEIS
Maps	
Change Map 2-7-C, Lands Identified by the BLM as Having Wilderness Characteristics in the 2008 RMP and in Subsequent Inventories (Baseline CSU), to add four new areas with wilderness characteristics.	Map 2-7-C
Change title of Map 2-21-C to High and Moderate Use Climbing and Canyoneering Areas (NSO) from High Use Climbing and Canyoneering Areas (NSO).	List of Maps and Map 2-21-C

Description of Changes	Location in MLP/FEIS
Change title of Map 2-38-B/D to Salt Wash Watershed (Baseline CSU, CSU) from Salt Wash Watershed (Baseline CSU).	List of Maps and Map 2-38-B/D
Separate Map 2-46-B/D titled Old Spanish National Historic Trail Resource Condition Category II Sites (CSU) into Map 2-46-B titled Old Spanish National Historic Trail (CSU) and Map 2-46-D titled Old Spanish National Historic Trail (CSU, LN).	List of Maps and Maps 2-46-B and 2-46-D
Add Map 2-60-A, Visual Resource Management Class II Areas Surrounding Arches National Park (CSU).	List of Maps and Map 2-60-A
Chapter 1	
Change text from “will conduct the MLP process” to “has conducted the MLP process.”	Section 1.1 (Introduction and Background)
Change text from “potential amendments” to “proposed amendments.”	Section 1.1 (Introduction and Background)
Change text from “The MLP process proposes new mineral leasing stipulations and development constraints accomplished through proposed amendments to the existing land use plans (Moab and Monticello RMPs). The EIS analyzes likely development scenarios and land use plan alternatives with varying mitigation levels for mineral leasing” to “New mineral leasing stipulations and development constraints would be accomplished through proposed amendments to the existing land use plans (Moab and Monticello RMPs). The EIS analyzes likely development scenarios and land use plan alternatives with varying mitigation levels for mineral leasing.”	Section 1.2.1 (Purpose and Need for the MLP/Purpose)
Change text from “Furthermore, the BLM has identified a need to evaluate mineral leasing decisions as a result of changing circumstances, updated policies, and new information” to “In evaluating mineral leasing decisions, as in any land use planning process, the BLM will consider changing circumstances, updated policies, and new information.”	Section 1.2.2 (Need)
Change “east-central” Utah to “southeast” Utah.	Section 1.3 (General Description of Planning Area)
Clarify text as follows: “This plan amendment would not make decisions regarding whether or not lands inventoried by the BLM as having wilderness characteristics should be managed to protect, preserve, and maintain these characteristics. Therefore, this plan amendment would not make decisions for managing new areas for their wilderness values. The BLM is required under Manual 6310 to keep current its inventory of wilderness characteristics.”	Section 1.4.1 (Issues to Be Addressed in the Moab MLP, Lands with Wilderness Characteristics)
Change the word “protect” to “minimize impacts to” lands with wilderness characteristics.	Section 1.4.1 (Issues to Be Addressed in the Moab MLP, Lands with Wilderness Characteristics)
Change reference of WO IM 2002-174, which is incorrect, to the Energy Policy Act of 2005.	Section 1.4.2, (Issues Considered But Not Further Analyzed) , Issues Addressed Through Policy or Administrative Action

Description of Changes	Location in MLP/FEIS
Update references to historic preservation laws that show legislative changes to the National Historic Preservation Act and Antiquities Act.	Section 1.4.2, (Issues Considered But Not Further Analyzed), Issues Addressed Through Policy or Administrative Action
Remove the bullet stating: “Changes in the process for exploration and development of potash.”	Section 1.4.2, (Issues Considered But Not Further Analyzed), Issues Beyond the Scope of the Plan
Remove the bullet stating: “Expiration of leases where the Moab MLP closes the area to leasing.”	Section 1.4.2, (Issues Considered But Not Further Analyzed), Issues Beyond the Scope of the Plan
Chapter 2	
Revise text to include a no leasing alternative for oil and gas in the Alternatives Considered But Not Analyzed in Detail section.	Section 2.3 (Alternatives Considered But Not Analyzed in Detail)
Modify the CSU stipulation requiring a Fugitive Dust Control Plan to include mineral activity that would involve truck traffic on unpaved or untreated roads.	Table 2-1 (Air Quality), Alternatives B and D
Add a list of VOC controls that also control greenhouse gases (GHGs).	Table 2-1 (Air Quality), Management Actions Common to All Alternatives
Change title of “Greenhouse Gas Mitigation” to “Air Quality and Greenhouse Gas Mitigation.”	Table 2-1 (Air Quality), Management Action Common to All
Add acreage for four areas identified by the BLM as having wilderness characteristics (73,026 acres). These four areas were submitted prior to the release of the MLP/DEIS, but determinations were not finalized until after the release of the MLP/DEIS.	Table 2-4 (Lands with Wilderness Characteristics), Alternative C
Revise text to: “Apply the Baseline CSU stipulation to the following lands identified by BLM as having wilderness characteristics, but not managed for this resource , in the 2008 RMPs.”	Table 2-4 (Lands with Wilderness Characteristics), Alternatives B, C, and D
Revise the Baseline CSU stipulation to state that the 15 acre unreclaimed surface disturbance limit per well pad is based on disturbance following interim reclamation.	Table 2-5 (Minerals: Oil and Gas), Alternatives B, C, and D and Table 2-6 (Minerals: Potash), Alternatives B1 and D
Revise the decision pertaining to phased leasing to remove the reference to exclusive use of directional and horizontal drilling and add in-situ recovery in association with solution mining. The decision now states that the purpose of phased potash leasing is to minimize resource conflicts and to test the feasibility of solution mining (in-situ recovery) for deep deposits of potash on public lands within the Planning Area utilizing drilling technology.	Table 2-6 (Minerals: Potash), Alternatives B1 and D
Change the text to clarify the Baseline CSU stipulation regarding the colocation of facilities as follows: “Facilities associated with potash production wells would be designed to minimize surface impacts.” Furthermore, revise the reference to “existing” roads in the same Baseline CSU stipulation as follows: “Pipelines and utilities would be placed along existing	Table 2-6 (Minerals: Potash), Alternatives B1 and D

Description of Changes	Location in MLP/FEIS
roads, including new roads constructed in association with the project.”	
Remove the Baseline CSU stipulation and replace with “Same as Alternative B2.”	Table 2-6 (Minerals: Potash), Alternative C
Add italicized text: “The BLM will not approve any application for potash prospecting permits or exploration licenses, or engage in competitive leasing <i>unless it is within a PLA.</i> ”	Table 2-6 (Minerals: Potash), Alternative B1 and D
Add italicized text: “Three PLAs are initially identified in the Planning Area: Upper Ten Mile, Red Wash, and Hatch Point. Identified PLAs include blocks of public land in areas where potash leases (Upper Ten Mile) or potash <i>prospecting</i> permits (Red Wash and Hatch Point) have been issued.”	Table 2-6 (Minerals: Potash), Alternative B1 and D
Change text to reflect correct terminology for potential fossil yield classification (PFYC) classes. Add “where appropriate” to the monitoring requirement for paleontological resources.	Table 2-8 (Paleontology), Alternatives A, B, C, and D
Add requirement for mechanical integrity testing recommended by the EPA to the CSU stipulation for the Courthouse Wash Watershed.	Table 2-11 (Soil and Water), Alternatives B and D
Modify the CSU stipulation to protect groundwater recharge in the Salt Wash Watershed requiring the operator to conduct reasonable tests which will demonstrate the mechanical integrity of the downhole equipment.	Table 2-11 (Soil and Water), Alternatives B and D
Add a CSU stipulation to the Salt Wash watershed requiring the use of closed loop drilling, the use of tanks for produced and backflow water, well integrity tests, and water monitoring.	Table 2-11 (Soil and Water), Alternatives B and D
Clarify text to indicate that BMPs to reduce fugitive dust emission would apply across the Planning Area and that the map (Map 2-31-B/C/D) shows those soils that are most vulnerable to fugitive dust emissions.	Table 2-11 (Soil and Water), Alternatives B, C, and D
Add a Lease Notice which provides protection for the Old Spanish National Historic Trail (OSNHT) in its entirety for a 2-mile width on both sides of the trail.	Table 2-12 (Special Designations), Alternative D
Add a CSU stipulation to the three high potential sites along the OSNHT (Kane Springs, Looking Glass Rock, and Colorado River Crossing near Moab). The CSU stipulation would require the lessee to maintain the current setting of the trail.	Table 2-12 (Special Designations), Alternative D
Add a CSU stipulation to two high potential segments of the OSNHT: 1) Moab Trail (1.4 miles) and 2) Mule Shoe (0.1 miles). The CSU stipulation would require the lessee to maintain the current setting of the trail.	Table 2-12 (Special Designations), Alternative D
Add a CSU stipulation to the generally undeveloped south side of the Blue Hills high potential segment (12.2 miles). The CSU stipulation would require the lessee to maintain the current setting of the trail.	Table 2-12 (Special Designations), Alternative D
Remove text that allowed construction activities within occupied Jones cycladenia habitat.	Table 2-13 (Special Status Species), Management Actions Common to All Alternatives

Description of Changes	Location in MLP/FEIS
Change the timing limitation for migratory birds from May 1 – July 30 to April 1 - July 31.	Table 2-13 (Special Status Species), Management Actions Common to All Alternatives
Change the CSU stipulation to state that noise mitigation efforts would be implemented with a maximum level of 55 decibels for production (measured at 350 feet from the source).	Table 2-15 (Visual Resource Management/Auditory Management (Soundscapes)), Alternatives C and D
Change the text to reflect the speculation in the projections for mineral development by adding the following statement “The above estimates are subject to the assumptions and caveats discussed in Section 4.12.3.” and by changing much of the wording from “would” to “could.”	Table 2-21 (Comparative Summary of Impacts), Social and Economic, All Alternatives
Add acreage for four areas identified by the BLM as having wilderness characteristics.	Table 2-21 (Lands with Wilderness Characteristics), Alternative C
Chapter 3	
Change text from “east-central” Utah to “southeast” Utah.	Section 3.1.1 (Project Area Overview /Geographic Setting)
Change the PM 2.5 standard from 15 to 12 ug/m3.	Section 3.2.2 (Air Quality /Existing Air Quality), Table 3-6 titled National Ambient Air Quality Standards
Change text from “grazing permits” to “livestock grazing” regarding GHG emissions.	Section 3.2.2 (Air Quality /Existing Air Quality), Current Condition
Add text regarding visibility trends at Canyonlands National Park.	Section 3.2.2 (Air Quality /Existing Air Quality), Visibility
Remove reference to Fox 1989 and the associated text.	Section 3.2.2 (Air Quality /Existing Air Quality), Atmospheric Deposition
Change National Ambient Air Quality Standard for ozone from 0.075 ppm ³ to 0.070 ppm ³ and change final rule citing.	Section 3.2.2 (Air Quality /Existing Air Quality), Table 3-6, National Ambient Air Quality Standards
Change text to address O ₃ exceedances.	Section 3.2.2 (Air Quality /Existing Air Quality), NAAQS
Change text to from “we emit” to “the United States emits.”	Section 3.2.2 (Air Quality /Existing Air Quality), Indicators
Update earth’s global mean surface temperature to reflect data in IPCC Fifth Report (2013).	Section 3.2.2 (Air Quality /Existing Air Quality), Global Effects
Remove sentence about the BLM being focused on identifying cultural landscapes, instead of site-specific resources.	Section 3.3.2 (Cultural Resources /Resource Overview)
Change text from “grazing” to “livestock” in relation to the use of water.	Section 3.4.1 (Lands and Realty /Resource Overview), Moab Field Office Lands and Realty Program
Add acreage for four areas identified by the BLM as having wilderness characteristics. Add clarifying text regarding acreage of lands possessing wilderness characteristics within the Planning Area.	Section 3.5.1 (Lands with Wilderness Characteristics), Resource Overview

Description of Changes	Location in MLP/FEIS
Change text to say: “These lands have been managed since this identification to prevent impairment of their wilderness character until Congress decides on their final disposition.”	Section 3.5.1 (Lands with Wilderness Characteristics), Resource Overview
Add text regarding impacts to groundwater resources from past drilling activity.	Section 3.7.1 (Minerals/Minerals: Oil and Gas), Historical Drilling Activity
Add text regarding the potential conflicts between oil/gas and potash.	Section 3.7.2 (Minerals/Minerals: Potash), Potential Conflicts Between Oil/Gas and Potash
Add definition of paleontological resources.	Section 3.8.1 (Paleontological Resources/Resource Overview)
Change text from “great periods” to “geologic eras.”	Section 3.8.1 (Paleontological Resources/Resource Overview)
Remove sentence that stated “The primary resource indicator is whether there is a loss of those characteristics that make the fossil locality or feature important for scientific use or public education and enjoyment” and replace with “The BLM paleontology program is mandated by PRPA to manage paleontological resources using scientific principles and expertise.”	Section 3.8.2 (Paleontological Resources/Current Management Practices)
Add date of search of the Utah Geological Survey (UGS) fossil database.	Section 3.8.2 (Paleontological Resources/Current Management Practices)
Replace “fossil localities” with “paleontological localities” and replace “fossil” with “paleontological resources” where appropriate.	Section 3.8.2 (Paleontological Resources/Current Management Practices)
Replace “certified” with “qualified” pertaining to paleontologists.	Section 3.8.2 (Paleontological Resources/Current Management Practices)
Replace “contracting permit” with “consulting permit.”	Section 3.8.2 (Paleontological Resources/Current Management Practices)
Add text to state that paleontological use permits would be issued in accordance with Handbook 8270.	Section 3.8.2 (Paleontological Resources/Current Management Practices)
Add text to update the number of paleontological permits issued within the Planning Area in 2015.	Section 3.8.2 (Paleontological Resources/Current Management Practices)
Add the following text “Illegal casting of dinosaur tracks, which causes irreparable harm to the surface of the rock, and the theft of dinosaur bone, are ongoing concerns in the Planning Area.”	Section 3.8.2 (Paleontological Resources/Current Management Practices)
Revise text to reflect the source of increased paleontological interest and awareness within the Planning Area.	Section 3.8.2 (Paleontological Resources/Current Management Practices)
Remove text in the paragraph describing the PFYC system and replace with a reference to the BLM Handbook 8270.	Section 3.8.3 (Paleontological Resources/Resource Characterization)

Description of Changes	Location in MLP/FEIS
Correct text from “the largest industries in San Juan County in 2009” to “the largest industries in San Juan County in 2013.”	Section 3.11.1 (Social and Economic /Summary and Update of Socioeconomic Conditions)
Add information regarding soil erodibility and the size distribution of soil particles.	Section 3.12.1 (Soil and Water/Soils), Resource Overview, Wind Erodible Soils
Add text to show the relationship between the Colorado and Green Rivers and the National Park boundaries.	Section 3.12.2 (Soil and Water/Water Resources), Surface Water Resources, Resource Overview, Rivers
Add text to state: “Streams within the Courthouse Wash and Salt Wash watersheds flow immediately into Arches National Park and then downstream to the Colorado River.”	Section 3.12.2 (Soil and Water/Water Resources), Surface Water Resources, Resource Overview, Streams
Update text to include the water rights agreement between Arches National Park and the State of Utah in both the Bartlett Wash and Seven Mile Wash Springs Areas.	Section 3.12.2 (Soil and Water/Water Resources), Surface Water Resources, Springs Areas, Bartlett Wash Springs Area and Seven Mile Wash Springs Area
Add text to acknowledge the existence of the monitoring station at the potash plant on private land.	Section 3.12.2 (Soil and Water/Water Resources), Surface Water Resources, Current Status and Trends, Monitoring
Revise text to reflect that the Total Maximum Daily Load (TMDL) was approved in June 2014.	Section 3.12.2 (Soil and Water/Water Resources), Surface Water Resources, Impaired Waters/TMDL
Add definition of Underground Sources of Drinking Water (USDWs).	Section 3.12.2 (Soil and Water/Water Resources), Groundwater Resources, Resource Overview)
Add a description of the Old Spanish National Historic Trail (OSNHT) to fully explain the trail resources within the Planning Area.	Section 3.14.2 (National Historic Trails)
Change “species of concern” to “wildlife species of concern.”	Section 3.16.2 (Special Status Species /Resource Overview)
Change habitat description for Jones cycladenia.	Section 3.16.2 (Special Status Species /Resource Overview)
Change “species of concern” to “wildlife species of concern.”	Section 3.19.1 (Wildlife and Fisheries /Resource Overview)
Add text to emphasize the importance of night skies in visual resource management.	Section 3.18.1 (Visual Resource Management/Auditory Management /Resource Overview), Visual Resources
Add information about natural soundscapes in relation to the National Park Service.	Section 3.18.1 (Visual Resource Management/Auditory Management /Resource Overview), Natural Soundscapes

Description of Changes	Location in MLP/FEIS
Add text to acknowledge the importance of National Park Service viewsheds.	Section 3.18.1 (Visual Resource Management/Auditory Management/Resource Overview), Current Management Practices
Add text to state: "A visual resource inventory (VRI) was conducted in 2011 for the BLM Moab Field Office. This inventory included an assessment of viewsheds from Arches National Park. The area adjoining the Park on both the northern and eastern side of the Park was rated as VRI Class II based on scenic quality, the amount of use, and distance zones. The land beyond the VRI Class II area was rated low for scenery and sensitivity (amount of use and distance). The ratings were determined from key observation points within Arches National Park."	Section 3.18.1 (Visual Resource Management/Auditory Management/Resource Overview), Current Management Practices
Correct text to state that the herd populations are either stable or decreasing.	Section 3.19.1 (Wildlife and Fisheries/Resource Overview), Desert Bighorn Sheep
Chapter 4	
Edit CO ₂ eq emissions to 6,525,000,000 metric tons and 0.00003 percent for annual United States emissions.	Section 4.3.2 (Air Quality/Air Quality Modeling and Quantitative Analysis), Greenhouse Gas Analysis
Change the timing limitation for migratory birds from May 1 – July 30 to April 1 - July 31.	Section 4.3.3 (Air Quality/Impacts Common to All Alternatives) and Section 4.17.2 (Special Status Species/Impacts Common to All Alternatives)
Change text to reflect the impacts of mineral development on the filming industry.	Section 4.5.3 (Lands and Realty/Impacts from Alternative A)
Revise text to reflect the added acreage of lands determined by the BLM as having wilderness characteristics.	Section 4.6.4 (Lands with Wilderness Characteristics), All Alternatives
Revise text to state that about 265,246 acres (192,220 identified in the 2008 RMPs and an additional 73,026 identified since the 2008 RMPs) are identified as having wilderness characteristics.	Section 4.6.4 (Lands with Wilderness Characteristics), All Alternatives
Revise assumption as follows: The resource protection measures identified in the Moab MLP will also apply to areas currently under lease where they do not conflict with the rights granted to the holder of the lease. While the BLM may not unilaterally add a new stipulation to an existing lease that it has already issued, the BLM can subject the development of existing leases to reasonable measures in order to minimize impacts to other resource values. These reasonable measures would be applied as Conditions of Approval to post lease actions (e.g. permits to drill) and may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures.	Section 4.8.1 (Minerals/Oil and Gas), Assumptions

Description of Changes	Location in MLP/FEIS
Add text concerning the impacts of overlapping timing limitations for wildlife and special status species on mineral operations.	Section 4.8.1 (Minerals /Oil and Gas) and Section 4.8.2 (Minerals /Potash), Impacts Common to All Alternatives
Add an analysis assumption explaining that BLM drilling experience has shown that plugging and closure procedures have proven successful in protecting groundwater resources.	Section 4.8.1 (Minerals /Oil and Gas), Assumptions
Remove text regarding prairie dog exception language. Prairie dogs are handled with a Lease Notice and there is no exception language included.	Section 4.8.1 (Minerals /Oil and Gas), Impacts Common to All Alternatives
Correct acreage total of areas within CSU and TL stipulations from 440,356 to 440,386.	Section 4.8.1 (Minerals /Oil and Gas), Impacts from Alternative A; Section 4.8.2 (Minerals /Potash), Impacts from Alternative A; Section 4.10.3 (Recreation /Impacts from Alternative A); Section 4.19.3 (Visual Resource Management /Impacts from Alternative A)
Add assumption as follows: The resource protection measures identified in the Moab MLP will also apply to areas currently under lease where they do not conflict with the rights granted to the holder of the lease. While the BLM may not unilaterally add a new stipulation to an existing lease that it has already issued, the BLM can subject the development of existing leases to reasonable measures in order to minimize impacts to other resource values. These reasonable measures would be applied as Conditions of Approval to post lease actions (e.g. exploration or production well approvals) and may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures.	Section 4.8.2 (Minerals /Potash), Assumptions
Change text to remove the reference to “prehistory” and replace with language from the PRPA regarding the loss of any identifiable paleontological resource.	Section 4.9 (Paleontological Resources)
Replace “fossil” with “paleontological resource” and remove the word “potentially” from “potentially fossiliferous bedrock.”	Section 4.9 (Paleontological Resources)
Change text from “significant” impact to “adverse” impact.	Section 4.9 (Paleontological Resources)
Replace “fossil” with “paleontological resource.”	Section 4.9.1 (Paleontological Resources /Assumptions)
Change sentence to read: “Recent trends have shown that the <i>current level</i> of mineral development <i>adjacent to</i> the Dead Horse Point and Island in the Sky districts did not precipitate.”	Section 4.10.3 (Recreation /Impacts from Alternative A)
Add text to clarify the relationship of the cited 2013 BLM reference (Dead Horse Lateral Pipeline) and its lack of applicability to greater concentrations of mineral development and large scale infrastructure in areas of heavy recreation usage.	Section 4.10.3 (Recreation), Impacts from Alternative A

Description of Changes	Location in MLP/FEIS
Add text regarding the trade deficit.	Section 4.12.3 (Social and Economic/Economic Impacts), Summary of Economic Impacts by Alternative
Add an assumption regarding potash facilities on recreation visitation. Add text detailing the impacts from mineral development to recreation in Alternative A. Reference recreation section (4.10.3) for additional impacts to recreation from mineral development for all alternatives. Add an example of mineral development impacts to recreation visitation.	Section 4.12.3 (Social and Economic/Economic Impacts), Recreation, Assumptions and Recreation Summary of Impacts
Add text discussing how resource protection measures will protect the Castle Valley and Glen Canyon Sole Source Aquifers.	Section 4.13.2 (Soil and Water/Water Resources), Impacts from Alternatives B, C, and D.
Add text concerning the effects to surface and groundwater quantity and quality resulting from mineral operations. Provide quantification for water use for oil and gas operations, as well as comparisons from total water use for mineral development and their corresponding impacts.	Section 4.13.2 (Soil and Water/Water Resources), Impacts from Alternatives A, B, C, and D
Add text to address the impacts of leaks and spills from mineral operations. Spills resulting in contamination of surface and groundwater could also adversely impact other associated resources such as wildlife and vegetation.	Section 4.13.2 (Soil and Water/Water Resources), Impacts from Alternatives A, B, C, and D
Add text to assess the impacts of proposed mineral leasing stipulations on impaired water bodies.	Section 4.13.2 (Soil and Water/Water Resources), Impacts from Alternatives A, B, C, and D
Add text to the analysis regarding the application an additional CSU stipulation requiring closed loop drilling, well integrity, and other constraints to the Courthouse Wash and Salt Wash watersheds.	Section 4.13.2 (Soil and Water/Water Resources), Impacts from Alternatives B and D
Add “the Baseline CSU stipulation” to the text describing the comparison of Alternatives.	Section 4.13.2 (Soil and Water/Water Resources), Impacts from Alternative D
Add text to assess the impacts of mineral leasing and development for the Old Spanish National Historic Trail (OSNHT).	Section 4.15.1 (Special Designations: National Historic Trails and Backways and Byways/National Historic Trails – Old Spanish National Historic Trail), Alternative D and Section 4.21.3 (Cumulative Impacts/Cumulative Impacts by Resource), Special Designations: National Historic Trails and Backways and Byways, National Historic Trails – Old Spanish National Historic Trail, Alternative D
Correct text to indicate that a CSU stipulation regulating noise generation would be applied in the same manner as Alternative C.	Section 4.19.6 (Visual Resource Management/Auditory Management (Soundscapes)), Alternative D
Chapter 5	

Description of Changes	Location in MLP/FEIS
Add information regarding consistency with other plans.	Section 5.2.6, Consistency with Other Plans
References	
Add reference: Blanco H., and R. Lal. 2008. <i>Principles of Soil Conservation and Management</i> . Springer, Heidelberg, Germany.	References List
Delete: Fox D.G.; Bartuska, A.M. Byrne, G. James et al. 1989. <i>A Screening Procedure to Evaluate Air Pollution Effects on Class I Wilderness Areas</i> . General Technical Report RM-168. US Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado.	References List
Appendix A	
Add text to the modification for the CSU stipulation for air quality and greenhouse gases to ensure that the stipulation is sufficient to maintain air quality and protect AQRVs.	Table A-1, Air Quality and Greenhouse Gases, All Alternatives
Eliminate exceptions and waivers for the CSU stipulation for drilling and production operations.	Table A-1, Air Quality, Alternatives B, C, and D
Modify the CSU stipulation requiring a Fugitive Dust Control Plan to include truck traffic on unpaved surfaces. Eliminate exception and waiver.	Table A-1, Air Quality, Alternatives B, C, and D
Change acreage to 265,246 for new areas identified by the BLM as having wilderness characteristics that are subject to the Baseline CSU stipulation.	Table A-1, Lands with Wilderness Characteristics, Alternative C
Add text to the Baseline CSU stipulation to clarify the exception regarding well spacing. The revised exception is as follows: If the requirement of 2 mile spacing would preclude a lessee/operator from exercising their lease rights where the spacing would locate a well pad outside of the lease.	Table A-1, Minerals, Alternative D
Add text to the Baseline CSU stipulation to state that potash facilities associated with production wells would be designed to minimize environmental impacts and the definition of existing roads includes those constructed for a project.	Table A-1, Minerals, Alternatives B1 and D
Revise the Baseline CSU stipulation to state that the 15 acre unreclaimed surface disturbance limit per well pad is based on disturbance following interim reclamation.	Table A-1, Minerals, Alternatives B1 and D
Change text to reflect correct terminology for potential fossil yield classification (PFYC) classes. Add "where appropriate" to the monitoring requirements for paleontological resources.	Table A-1, Paleontology, Alternatives B, C, and D
Revise the text in the NSO stipulation for high use routes. The wording was changed to high use motorized routes (jeep) and non-motorized trails (hiking and bicycle).	Table A-1, Recreation, High Use Recreation Routes, Alternatives B, C, and D
Eliminate the modification allowing for new routes or trails. This modification was eliminated because it was determined it would violate existing lease rights.	Table A-1, Recreation, High Use Recreation Routes, Alternatives B and D
Modify the CSU stipulation to specify that the authorized officer can require the operator to conduct reasonable tests which will demonstrate the mechanical integrity of the downhole	Table A-1, Water, Courthouse Wash and Salt Wash Watersheds, Alternatives B and D

Description of Changes	Location in MLP/FEIS
equipment. Apply modified stipulation to both Courthouse Wash and Salt Wash watersheds.	
<p>Add the following CSU stipulations:</p> <p>A visual assessment of lands within 2 miles of three high potential sites along the OSNHT (Kane Springs, Looking Glass Rock, and Colorado River Crossing near Moab) would be required. A proposed mineral operation would not result in long-term impairment of the OSNHT viewshed from the perspective of the casual observer from the OSNHT.</p> <p>A visual assessment of lands within 2 miles of two high potential segments along the OSNHT (Moab Trail and Mule Shoe) would be required. A proposed mineral operation would not result in long-term impairment of the OSNHT viewshed from the perspective of the casual observer from the OSNHT.</p> <p>A visual assessment of lands within 2 miles of the south side of the Blue Hills high potential segment along the OSNHT would be required. A proposed mineral operation would not result in long-term impairment of the OSNHT viewshed from the perspective of the casual observer from the OSNHT.</p> <p>The existing Class B roads that cross the stipulated area could be utilized as a corridor for the transportation of potash (either by pipeline or truck) from a PLA to a PPFA and are not subject to this stipulation.</p>	Table A-1, Special Designations: National Historic Trails, Old Spanish National Historic Trail, Alternative D
Modify the CSU stipulation for sensitive plant species to include a 300 foot avoidance area as recommended by USFWS.	Table A-1, Special Status Species, BLM Sensitive Plant Habitat, Alternatives B and D.
Change the CSU stipulation to state that noise mitigation efforts would be implemented with a maximum level of 55 decibels for production (measured at 350 feet from the source).	Table A-1, Auditory Management – Soundscape, Lands Bordering Arches and Canyonlands National Park
Add Lease Notice for the Old Spanish National Historic Trail.	Table A-2, Special Designations: National Historic Trail, Old Spanish National Historic Trail, Alternative D
Revise Lease Notice for yellow-billed cuckoo based on direction from USFWS.	Table A-2, Yellow-billed Cuckoo, Yellow-billed Cuckoo Habitat, All Alternatives
Change the timing limitation for migratory birds from May 1 – July 30 to April 1 – July 31.	Table A-2, Migratory Birds, All Alternatives
Revise language for Jones <i>cycladenia</i> based on the specific language provided by USFWS.	Table A-2, Jones <i>cycladenia</i> , Potential Suitable and Occupied Habitat, All Alternatives
Appendix B	
Revise the wording of the best management practice (BMP) to substitute “quiet design mufflers” for “hospital grade sound reducing mufflers.”	Visual Resources/Noise/Night Skies, Noise
Add a BMP requiring the development of a Lightscape Management Plan where an extensive amount of long term permanent lighting is proposed.	Visual Resources/Noise/Night Skies, Night Skies